

2.01	<b>EXPANDING</b>	8	<b>LONGITUDINAL SCREW CLAMP</b>
2.02	.Collet type	9.1	<b>SOCKET TYPE</b>
2.03	..Fixed jaws and moving cam	14	.Multiple alternative
2.04	..Fixed cam and moving jaws	16	.Self-centering of floating
2.05	.Jaws mounted on flexible member; i.e., diaphragm	17	..Radially reciprocating jaws
2.06	.Fluid-pressure actuator	18	..Transverse holder and setscrew
2.07	..Directly expanding jaws	19	.Lost motion
2.08	...Jaw is expansible chamber; i.e., bladder type	19.1	..Swinging external yoke or detent
2.09	..Expanding jaws via mechanical connection	19.2	...Rotary socket
2.1	.Axially moving actuator	19.3	..Rotary socket
2.11	..Wedge	19.4	..Spreading elements
2.12	...Internal cone	19.5	..Key retainer
2.13	...With jaw positively interlocked with wedge; e.g., dovetail or T-slot	19.6	..Sleeve type retainer
2.14	...With resilient means contacting nonresilient jaw	19.7	...Sleeve in socket
2.15	....Constricting band, annulus, or clip	20	.Fluid-conduit drill holding
2.16	..Toggle	20.1	.Feed type
2.17	..Axially compressible element expands radially		.Self-grasping
2.18	..Lever		..Yielding grasping jaws
2.19	.Rotary actuator	22	...Ball or roller
2.2	..Clutch or self-actuating type	23.1	...Spring jaws
2.21	.Jaw structure	24	..Yielding detent
2.22	..Resilient		..One-way-clutch type
2.23	..Ball or roller	28	...Wedge
2.24	..Pivoted	29	...Side detent
3	<b>VACUUM</b>	30	....Ball or roller
4.01	<b>WITH FLUID-PRESSURE ACTUATOR</b>	32	.Conical clamp threaded in socket
4.02	.With measuring, indicating or control means	33	.Transversely oscillating jaws
4.03	.Jaw is expansible chamber; i.e., bladder type	34	..Screw actuated
4.04	.Pneumatic type	35	.Pivoted jaws
4.05	.Jaws mounted on flexible member; i.e., diaphragm		..Moving-cam actuator
4.06	.Socket type	36	...Threaded cam sleeve
4.07	..Collet	37	...Reciprocating cam sleeve
4.08	...Fixed cam and moving jaws	38	..Fixed cam and moving jaws
4.09	...Moving cam and fixed jaws	39	...Axial screw actuator
4.1	.Radially reciprocating jaws	40	...Threaded-sleeve actuator
4.11	..Fluid pressure directly moves jaws	42	.Resilient split socket
4.12	..Fluid pressure moves jaws via mechanical connection	43	..Threaded cam sleeve
5	<b>ANGULARLY ADJUSTABLE OR INDEXING</b>	43.1	..Reciprocating cam sleeve
6	<b>ECCENTRIC</b>	43.2	..Unitary
7	<b>THREADED GRIP</b>	43.3	...Split at one end only
		43.4	....Transverse screw actuator
		43.5	....Cam actuator
		43.6	...Split end to end
		43.7	...With jaw pads or insert
		43.8	..Nonresilient member biased by a resilient member
		43.9	..Resilient member reinforced by another resilient member
			.With means to exclude contaminants; e.g., seal, shield
		44	.One movable side

45	..Sleeved	81	..Rotary cam sleeve
46.1	.Spring biased jaws	82	..Reciprocating sleeve
46.2	..Unitary	83	..Set screw
46.3	...Split at one end only	84	..U-clamp
46.4	...Split at both ends	85	..Plural bolt
46.5	...Split end to end	86	..Single transverse bolt
46.6	...With jaw pads or insert	87	..Longitudinal clamping wedge
46.7	..Nonresilient member biased by a resilient member	89	.Shouldered-tang holding
46.8	..Resilient member reinforced by another resilient member	90	..Cap
46.9	..With means to exclude contaminants; e.g., seal, shield	91	...Screw
	..Moving-cam actuator	93	.Tang offset within socket
47	...Threaded sleeve and wedge	94	.Tang offset without socket
48	...Threaded cam sleeve	95	.Bottomless
49	....Loose jaws	96	..Friction grip
50	...Reciprocating cam sleeve	97	.Transverse pin
51	..Fixed cam and moving jaws	99	.Screw threaded
52	...Threaded-sleeve actuator	100	..Nut lock
53	..Axial screw actuator	101	...Threaded sleeve
54	..Loose jaws	102	.Friction grip
55	.Loose jaws	103	..Drill type
	..Moving-cam actuator	104	.Barbed or pronged tang
56	...Threaded cam sleeve	105	.Molded or cast-in tang
57	..Reciprocating cam sleeve	105.1	.Adjustable length or size
58	..Fixed cam and moving jaws	106	<b>PIVOTED JAW</b>
59	...Threaded sleeve and body	107	.Cam-sleeve actuated
60	.Obliquely guided reciprocating jaws	108	.Internal-cone actuated
61	..Threaded sleeve and jaw	109	.Toggle actuated
62	..Conical sleeve	110	<b>RADIALLY RECIPROCATING JAWS</b>
63	..Threaded central cone and jaw	111	.With indicator
64	..Threaded sleeve and body	112	.Transverse-screw actuated
65	..Reciprocating jaw advancing sleeve	113	..Annular rack
66	..Radially reciprocating jaws	114	.Spiral cam or scroll actuated
67	..Transverse-screw actuated	115	..Worm
68	...Interlaced jaws	116	..Bevel pinion
	..Moving-cam actuator	117	.Rack-and-pinion actuated
69	...Threaded cam sleeve	118	.Toggle actuated
70	...Threaded sleeve and wedge	119	.Lever actuated
71	...Rotary eccentric-cam sleeve	120	..Internal cone
72	....Roller and rocking jaw	121	.Wedge actuated
73	....Worm actuated	122	.External-cone actuated
74	...Reciprocating cam sleeve	123	.Jaws
75	....Ball or roller jaws	124	..With means to facilitate jaw removal
76	.Side detent	125	<b>WITH SAFETY FEATURE</b>
77	..Pivoted or rotary	126	<b>WITH MEASURING, INDICATING OR CONTROL MEANS</b>
78	...Sleeved	127	<b>DOUBLE ACTING</b>
79	..Spring	128	<b>WITH MAGNETIC OR ELECTROSTATIC MEANS</b>
80	...Sleeved	129	<b>BY CENTRIFUGAL FORCE</b>
		130	.To counterbalance jaws
		131	.To grip tool or workpiece
		132	<b>COMPENSATION FOR ECCENTRICITY</b>

- 133 WITH CENTERING MEANS
- 134 SEPARATE CHUCK-ACTUATING POWER SOURCE
- 135 .Self-contained
- 136 FOR GEAR OR SPLINE MOLDING
- 137 MORE THAN ONE SET OF GRIPPING MEANS
- 138 TORSION MANDREL
- 139 JAWS MOUNTED ON FLEXIBLE MEMBER;  
I.E., DIAPHRAGM
- 140 MEANS TO PREVENT JAW LOOSENING
- 141 MEMBER APPLIES AXIAL FORCE COMPONENT
- 142 ACCESSORY OR COMPONENT
- 143 .Adapter
- 144 ..Drive conversion
- 145 ..For particular tool or workpiece
- 146 .Sliding cam chuck actuator
- 147 .Chuck key
- 148 ..Safety feature; e.g., ejector, interlock
- 149 ..Key holding or attaching means
- 150 ..Nonseparable or built-in
- 151 .Padded or cushioned jaw
- 152 .Jaw insert
- 153 ..Machinable jaw
- 154 ...Locking or positioning means
- 155 .Tool or workpiece ejector
- 156 .Tool or work stop or locator
- 157 .Protection means; e.g., cover, seal, overstress prevention, air blast
- 158 MISCELLANEOUS

**CROSS-REFERENCE ART COLLECTIONS**

- 900 ADAPTED FOR AUTOMATIC TOOL CHANGER
- 901 CHUCK OR CHUCK JAW CHANGING MEANS
- 902 KEYLESS TYPE SOCKET
- 903 NEEDLE ROLLER TYPE SOCKET
- 904 QUICK CHANGE SOCKET
- 905 .With ball detent
- 906 SELF GRASPING SOCKET
- 907 WASHER TYPE JAW OR ACTUATOR

**FOREIGN ART COLLECTIONS**

- FOR CLASS-RELATED FOREIGN DOCUMENTS

